Notice of Allowability	Application No.	Applicant(s)
	09/847,889	HIND ET AL.
	Examiner	Art Unit	
	Susanna M. Diaz	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the Examiner's Amendment agreed to on February 16, 2006*.

2. ☒ The allowed claim(s) is/are *1-27*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

SUSANNA M. DIAZ
PRIMARY EXAMINER

AU3623

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with John Brancolini (Reg. No. 57,218) on February 16, 2006.

The application has been amended as follows:

1. (Currently Amended)   A computer-implemented method of inferring

identifying characteristics associated with a particular person, the method comprising

the steps of:

storing on a computer transaction information <u>representing purchases</u> associated

with a plurality of different persons;

collecting product information from RFID-tagged items carried on a particular

person, said product information comprising non-unique identification information;

correlating, using said computer, the product information with the transaction

information; ~~and~~

inferring identifying characteristics associated with the particular person based on

results of the correlating step <u>by comparing said transaction information and identifying</u>

<u>at least one set of characteristics associated with an individual, said individual having</u>

<u>transaction information indicating that the RFID-tagged items match items purchased by</u>

<u>said particular person;</u>

determining which of said at least one set of characteristics has the highest

likelihood of being associated with said particular person based on a set of correlation

criteria, said criteria used to narrow a group of individuals to said particular person; and

inferring said particular person has said determined set of characteristics based

upon the results of the determining step.

2. (Previously presented) The method of claim 1, wherein the identifying step

infers demographics of the particular person based on the results of the correlating step.

3. (Previously presented) The method of claim 1, wherein the identifying step

infers the exact identity of the particular person based on the results of the correlating

step.

4. (Previously presented) The method of claim 1, further comprising:

tracking the particular person as the particular person roams through roaming

areas using the inferred identifying characteristics and the product information

associated with the particular person.

5. (Original) The method of claim 4, further comprising:

providing targeted advertising using information obtained from said tracking step.

6. (Previously presented) The method of claim 1, wherein the product information includes an SKU number associated with a product.

7. (Original) The method of claim 1, wherein the RFID-tagged items include RFID tags incorporated therein and carrying the product information.

8. (Currently Amended) A computer-implemented method of inferring the identity of a person based on RFID-tagged items carried on the person, the method comprising the steps of:

collecting RFID tag information from the RFID-tagged items carried on the person and storing said collected RFID tag information on a computer, said RFID tag information comprising non-unique identification information;

associating movements of the person with the collected RFID tag information as the person roams through roaming areas using said computer; and

inferring the identity of the person in the roaming areas based on results from the associating step, using said computer by comparing said collected RFID tag information and identifying at least one set of characteristics associated with an individual, said individual having transaction information indicating that the RFID-tagged items match items purchased by said particular person;

determining which of said at least one set of characteristics has the highest likelihood of being associated with said particular person based on a set of correlation criteria, said criteria used to narrow a group of individuals to said particular person; and

inferring said particular person has said determined set of characteristics based

upon the results of the determining step.

9. (Original) The method of claim 8, wherein, in the associating step, the person

is

associated with the collected RFID tag information without using any information about

the exact identity or purchase records of the person.

10. (Original) The method of claim 1, wherein the RFID-tagged items include

RFID tags incorporated in the RFID-tagged items, said RFID tags carrying product

information.

11. (Currently Amended) A computer-implemented system for inferring

identifying characteristics associated with a particular person, the system comprising:

a storage unit for storing transaction information representing purchases

associated with a plurality of different persons;

at least one RFID tag scanner for collecting product information from RFID-

tagged items carried on a particular person, said product information comprising non-

unique identification information; and

a correlation module, operatively coupled to the storing unit and the RFID tag

scanner, for correlating the product information with the transaction information, and

inferring identifying characteristics associated with the particular person based on the

correlation results <u>by comparing said transaction information and identifying at least one</u>

<u>set of characteristics associated with an individual, said individual having transaction</u>

<u>information indicating that the RFID-tagged items match items purchased by said</u>

<u>particular person, determining which of said at least one set of characteristics has the</u>

<u>highest likelihood of being associated with said particular person based on a set of</u>

<u>correlation criteria, said criteria used to narrow a group of individuals to said particular</u>

<u>person, and inferring said particular person has said determined set of characteristics</u>

<u>based upon the results of the determining step.</u>

12. (Previously presented) The system of claim 11, wherein the correlation

module infers demographics of the particular person based on the correlation results.

13. (Previously presented) The system of claim 11, wherein the correlation

module infers the exact identity of the particular person based on the correlation results.

14. (Previously presented) The system of claim 11, wherein the correlation

module includes a tracking unit for tracking the particular person as the particular

person roams through roaming areas using the inferred identifying characteristics and

the product information associated with the particular person.

15. (Previously presented) The system of claim 11, wherein the product

information includes an SKU number associated with a product.

16. (Original) The system of claim 11, wherein the RFID-tagged items include

RFID tags incorporated therein and carrying the product information.

17. (Currently Amended) A system for inferring the identity of a person based on

RFID-tagged items carried on the person, the system comprising:

at least one RFID tag scanner for collecting RFID tag information from the RFID-

tagged items carried on the person, said RFID tag information comprising non-unique

identification information; and

a tracking unit, coupled to the RFID tag scanner, for associating movements of

the person with the collected RFID tag information as the person roams through

roaming areas, and inferring the identity of the person in the roaming areas based on

the association results by comparing said collected RFID tag information and identifying

at least one set of characteristics associated with an individual, said individual having

transaction information indicating that the RFID-tagged items match items purchased by

said particular person, determining which of said at least one set of characteristics has

the highest likelihood of being associated with said particular person based on a set of

correlation criteria, said criteria used to narrow a group of individuals to said particular

person, and inferring said particular person has said determined set of characteristics

based upon the results of the determining step.

18. (Original) The system of claim 17, wherein the tracking unit associates the

person with the collected RFID tag information without any information about the exact

identity or purchase records of the person.

19. (Currently Amended) A computer program product embodied on computer

readable media readable by a computing device, for inferring identifying characteristics

associated with a particular person, the computer program product comprising computer

executable instructions for:

storing transaction information representing purchases in associated with a

plurality of different persons;

collecting product information from RFID-tagged items carried on a particular

person, said product information comprising non-unique identification information;

correlating the product information with the transaction information; and

inferring identifying characteristics associated with the particular person based on

results of the correlation by comparing said transaction information and identifying at

least one set of characteristics associated with an individual, said individual having

transaction information indicating that the RFID-tagged items match items purchased by

said particular person;

determining which of said at least one set of characteristics has the highest

likelihood of being associated with said particular person based on a set of correlation

criteria, said criteria used to narrow a group of individuals to said particular person; and

inferring said particular person has said determined set of characteristics based

upon the results of the determining step.

20. (Previously presented) The computer program product of claim 19, wherein

the computer executable instructions infers demographics of the particular person

based on the results of the correlation.

21. (Previously presented) The computer program product of claim 19, wherein

the computer executable instructions infer the exact identity of the particular person

based on the results of the correlation.

22. (Previously presented) The computer program product of claim 19, further

comprising computer executable instructions for tracking the particular person as the

particular person roams through roaming areas using the inferred identifying

characteristics and the product information associated with the particular person.

23. (Previously presented) The computer program product of claim 19, wherein

the product information includes an SKU number associated with a product.

24. (Original) The computer program product of claim 19, wherein the RFID-

tagged items include RFID tags incorporated therein and carrying the product

information.

25. (Currently Amended) A computer program product embodied on computer

readable media readable by a computing device, for inferring the identity of a person

based on RFID-tagged items carried on the person, the computer program product

comprising computer executable instructions for:

collecting RFID tag information from the RFID-tagged items carried on the

person, said RFID tag information comprising non-unique identification information;

associating movements of the person with the collected RFID tag information as

the person roams through roaming areas; ~~and~~

inferring the identity of the person in the roaming areas based on the associating

results by comparing said collected RFID tag information and identifying at least one set

of characteristics associated with an individual, said individual having transaction

information indicating that the RFID-tagged items match items purchased by said

particular person;

determining which of said at least one set of characteristics has the highest

likelihood of being associated with said particular person based on a set of correlation

criteria, said criteria used to narrow a group of individuals to said particular person; and

inferring said particular person has said determined set of characteristics based

upon the results of the determining step.

26. (Original) The computer program product of claim 25, wherein the person is

associated with the collected RFID tag information without any information about the

exact identity or purchase records of the person.

27. (Original) The computer program product of claim 19, wherein the RFID-

tagged items include RFID tags incorporated in the RFID-tagged items, said RFID tags

carrying product information.

Allowable Subject Matter

2.   Claims 1-27 are allowed.

3.   The following is an examiner's statement of reasons for allowance:

Turner (U.S. Patent No. 6,577,275) discloses a system that assigns each

customer a tag as he/she enters a store. Through use of this tag, the customer's

movement throughout the store is monitored and advertisements may be targeted to the

customer. However, unlike the claimed invention, Turner fails to teach or suggest

inferring, from non-unique RFID-tagged items carried by a customer, a customer's

identity based on a match between the RFID-tagged items and stored customer-specific

transaction details indicative of items purchased by the customer.

Otto et al. (U.S. Patent No. 6,659,344) discloses a system in which the activity of

shoppers in a market is monitored by identifying the movement of tagged items (e.g.,

into a shopper's cart, back to a shelf, etc.). General inferences about the customer may be made based on monitored activity; however, such general inferences are only used to make equally general recommendations, such as which sauce to buy to accompany the spaghetti in the customer's shopping cart. Unlike the claimed invention, Otto fails to teach or suggest inferring, from non-unique RFID-tagged items carried by a customer, a customer's identity based on a match between the RFID-tagged items and stored customer-specific transaction details indicative of items purchased by the customer.

Kaufman et al. (U.S. Patent No. 6,700,960) infers an exact customer identity by matching analyzed calling patterns to stored calling patterns already correlated with a set of customers to identify the customer with the closest match. However, Kaufman does not teach or suggest that items actually carried by a customer are RFID-tagged with non-unique identification information. Since Kaufman deals with the tracking of telephone calls and not physical items that a customer would carry around, the Examiner submits that one of ordinary skill in the art at the time of Applicant's invention would not have been motivated to adapt Kaufman's profile analysis of customer patterns of use of service to an environment in which customers have made more tangible purchases (e.g., of physical items that can be carried around and tagged with RFID devices). Consequently, Kaufman fails to teach or suggest inferring, from non-unique RFID-tagged items carried by a customer, a customer's identity based on a match between the RFID-tagged items and stored customer-specific transaction details indicative of items purchased by the customer.

All of claims 1-27 recite the details of inferring, from non-unique RFID-tagged items carried by a customer, a customer's identity based on a match between the RFID-tagged items and stored customer-specific transaction details indicative of items purchased by the customer (the combination of which is not taught of suggested by the prior art of record); therefore, claims 1-27 are deemed to be allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yarin et al. (U.S. Patent No. 6,294,999) -- Discloses a system and method for monitoring patient compliance with medication regimens by detecting electromagnetic tags affixed to medication containers.

Bodin (US 2003/0040922) -- Discloses a system and method for intelligent merchandise indicator and product information provision.

Song (U.S. Patent No. 6,865,546) -- Discloses a purchasing system that infers the age of a gift recipient based on items purchased for the recipient.

Hind et al. (JP 2002-319001) -- Discloses the use of RFID tags for tracking customers and purchases.

Dawe et al. ("Information Supply Chain: Build Systems to Meet Needs") --

Discusses some of IBM's research related to RFID systems.

Janoff ("Lines of Communication") -- Discusses various applications of radio

frequency technology.

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-

6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Susanna M. Diaz
Primary Examiner
Art Unit 3623

February 16, 2006